

Solve each formula for the selected variable.

1) $C = 2\pi r$ (solve for r)

2) $A = \pi r^2$ (solve for r)

3) $d = rt$ (solve for t)

4) $A = \frac{1}{2}h(b_1 + b_2)$ (solve for b_1)

5) $P = C + rC$ (solve for r)

6) $y = mx + b$ (solve for m)

7) $a^2 + b^2 = c^2$ (solve for a)

Use the percent proportion to solve.

8) 36 is what percent of 80?

9) 18.6 is 15.5% of what number?

10) What is 70% of 50?

11) 28 is 20% of what number?

Find the unit rate for each.

13) 366 miles in 22 hours

14) \$6.75 for 9 pounds

15) 42 fish in 60 gallons of water

16) 126 eggs in 14 baskets

17) 388 miles with 16 gallons of gas

Solve.

18) A beautician named Pinkie Paige usually earned 20% of the total bill as a tip. To earn \$60 in tips, what would Pinkie's total service fees need to be?

19) Silly Sally wanted a pair of jeans that normally sells for \$75. One day, Silly Sally discovered that the jeans were on sale for 35% off. What is the sale price of the jeans that Silly Sally so desperately wanted?

20) Lickety-Split Loudon was a professional wrestler who was known for pinning his opponents in record time. Being the extremely busy person that a professional wrestler is, Loudon hired a personal assistant to schedule all of his appointments and appearances. As is customary in the world of such celebrity, the personal assistant earned 20% of Loudon's annual salary. If Loudon earned \$2,042,500 in 2010, how much did his assistant earn?